

ABSTRACT OF THE DISCLOSURE

A gearbox actuator comprising a selector shaft **2** which is arranged in a housing and is driven by a drive. A shift finger **3** and disengaging shaped elements **4** used to actuate gearshift rails are arranged on the selector shaft, and jibs for **12-15** supporting and guiding the gearshift rails are arranged on the housing. The gearbox actuator **1** comprises the central selector shaft **2** mounted in bearing elements **19** and comprises a shift finger **3** and two disengaging shaped elements **4** arranged in the center thereof, at a distance corresponding to the width of a channel. Preferably, the selector shaft **2** is driven by a brushless motor **5** by means of a double planetary stage **6** and a toothed segment **7** which engages a toothed wheel **16** that is preferably positioned in a housing element **17**. A preferably second brushless motor **8** drives a sliding element **37** by means of spindle **9**, the sliding element displacing the shift finger **3** and the disengaging shaped elements **4** on the selector shaft **2**.